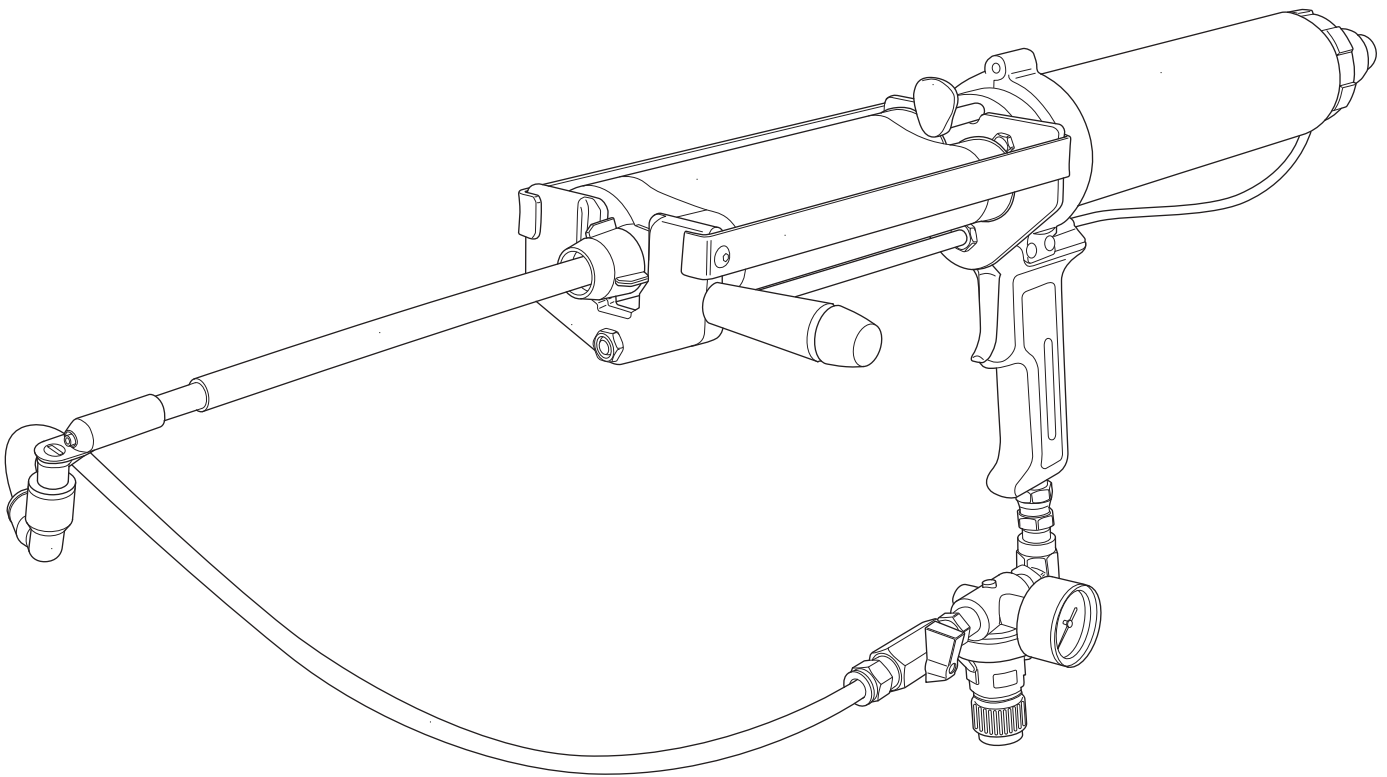


**3M**

# Scotchkote™ Spray System HSS-450

For Spray Application of 3M™ Scotchkote  
Liquid Epoxy Coating 323

User Instructions



## 3M™ Scotchkote™ Spray System HSS-450 Safety Statements

Read, understand and follow all safety information contained in these user instructions prior to setup and operation of the 3M™ Scotchkote™ Spray System HSS-450. Retain these instructions for future reference.

### Intended Use

Prior to setup and use:

- Read the 3M™ Scotchkote™ Liquid Epoxy Coating 323 Parts A and B MSDSs, labels and product data sheet.
- Select and use personal protective equipment based on exposure assessment of the specific application situation.

The 3M™ Scotchkote™ Spray System HSS-450 is intended for use only by a trained and professional tradesman, and used solely for the purpose of spray application of 3M™ Scotchkote™ Liquid Epoxy Coating 323. This equipment must only be used in areas that are compatible with the material being sprayed, and in strict compliance with applicable local and federal regulations.




The 3M™ Scotchkote™ Spray System HSS-450 is intended for use in a wide variety of spray applications using 3M™ Scotchkote™ Liquid Epoxy Coating 323. It is designed for use where fast and easy setup, no clean up, minimal material waste and essentially no equipment maintenance are highly desirable.

The system must be installed as specified in the *3M™ Scotchkote™ Spray System HSS-450 Instructions*, and is intended for use in a professional/industrial environment only. It has not been evaluated for other uses or locations.

### Disposal of product related waste

Refer to Section 13 of the 3M™ Scotchkote™ Liquid Epoxy Coating 323 Parts A and B MSDSs and applicable regulations or authorities for waste disposal.

### Safety Statements and Symbols

Explanation of Signal Word Consequences	
 DANGER:	Indicates a potentially hazardous situation, which, if not avoided, will result in death or serious injury and/or property damage.
 WARNING:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
 CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.
CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in property damage.

Explanation of Product Safety Label Symbols	
	Attention: Read accompanying documentation
	Warning: Risk of Toxic Vapor Concentrations

## Safety Statements and Symbols (continued)

### WARNING

To reduce the risks associated with chemical exposure:

- Read and understand all safety information contained in each applicable material MSDS and on the label on each dual material cartridge inserted into the applicator system prior to use;
- This applicator equipment is only to be used by trained professionals who are familiar with its possible hazards;
- Do not point the applicator at anyone or at any part of your body;
- Always wear appropriate Personal Protective Equipment including eye, respiratory, and skin protection as required for each application. Select and use personal protective equipment based on exposure assessment of the specific application situation.

To reduce the risks associated with fire and explosion:

- Use applicator only in well ventilated area to control vapor concentrations;
- Keep cartridge materials and applicator system away from fire;
- Check and follow all applicable national, state and local codes regarding safety, fire codes and air exhaust for each application;
- Use only 3M approved dual component cartridge materials in the applicator system

### CAUTION

To reduce the risks associated with air pressure:

- Ensure air line input < 145psi and that applicator system regulators are properly adjusted prior to each use;
- Do not alter or modify the applicator system and use only 3M approved service parts;
- Check the applicator system air pressure regulators, all hoses, mixing tubes, connections and all other air pressurized components for secure attachment and damage daily and replace all worn or damaged parts prior to use;
- Ensure line air supply is adequately conditioned for the applicator system and the application;
- Follow required air pressure relief procedures for relieving air pressure from the unit

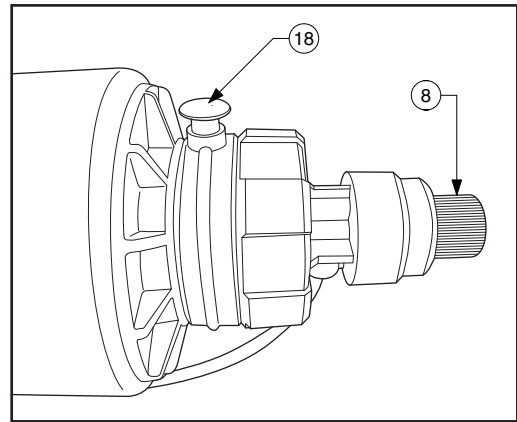
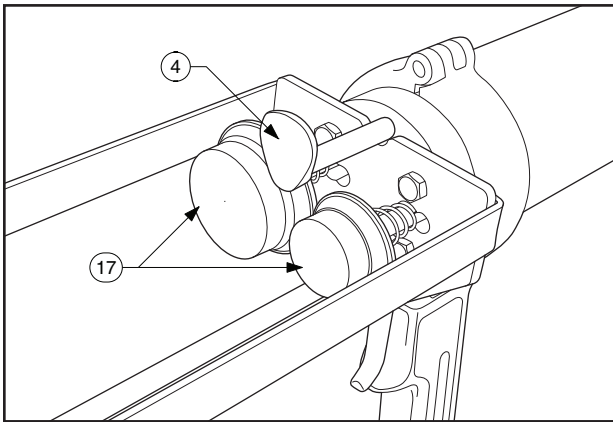
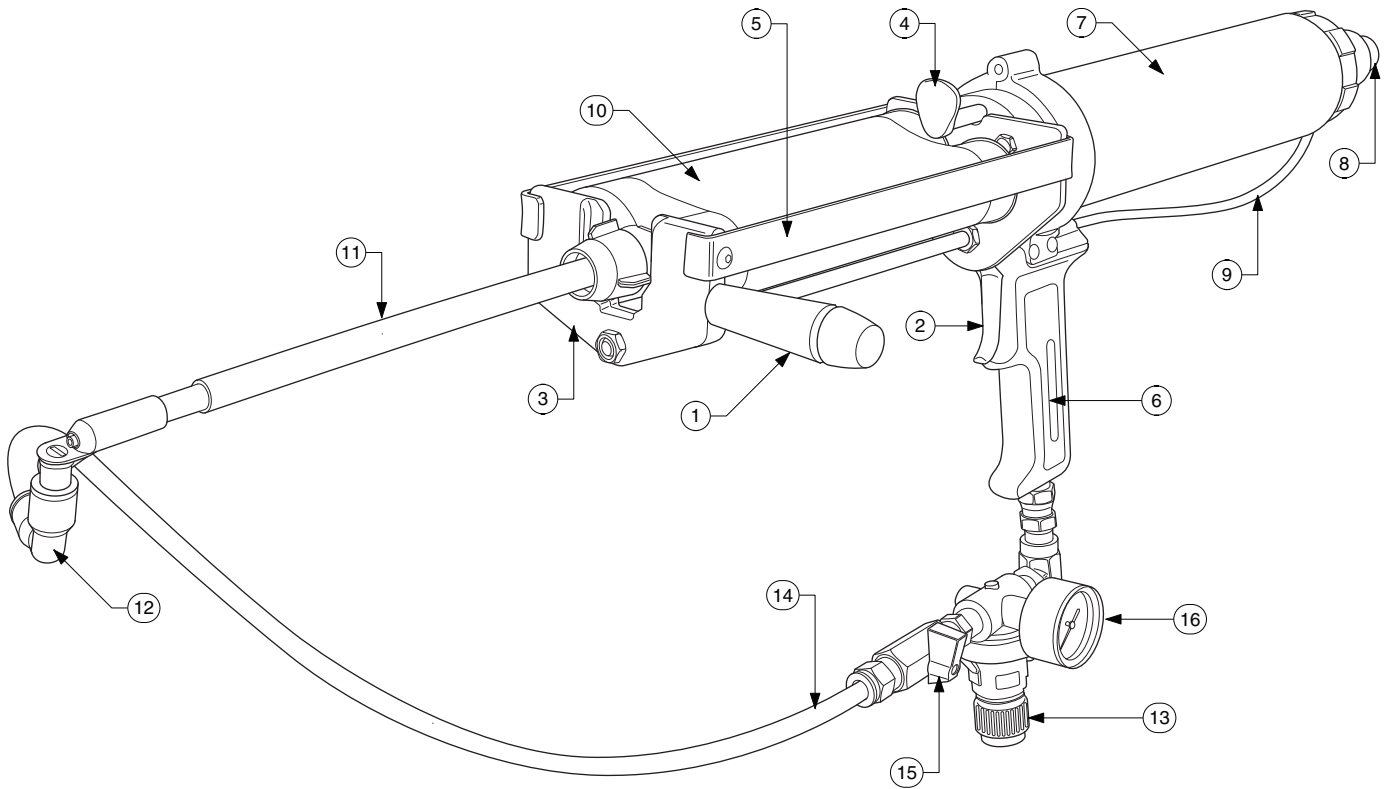
To reduce the risks associated with impact:

- Handle and operate the applicator system with both hands to prevent dropping the unit;
- Route supply line air hose away from traffic areas, sharp edges, moving parts and hot surfaces to prevent tripping and component failure

To reduce the risks associated with environmental contamination:

- Dispose of used material cartridges, mixing tubes and nozzles per federal, state and local regulations

### 3M™ Scotchkote™ Spray System HSS-450 Applicator Parts Nomenclature

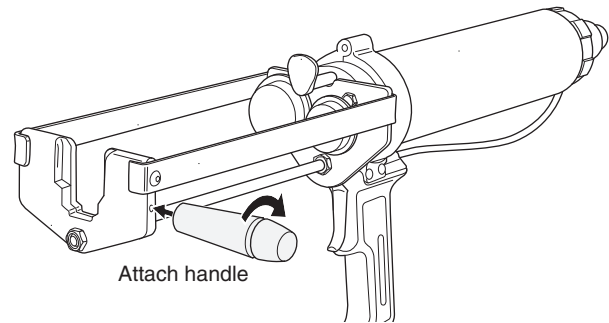


- |                                |   |
|--------------------------------|---|
| 1. Forward Handle              | 10. Cartridge                           |
| 2. Trigger                     | 11. Mix Nozzle                          |
| 3. Front Plate                 | 12. 90° Elbow Connector                 |
| 4. Return Pusher/Indicator Rod | 13. Nozzle Air Pressure Adjustment Knob |
| 5. Frame Assembly              | 14. Nozzle Air Supply Hose              |
| 6. Handle                      | 15. Mini Ball Valve                     |
| 7. Piston Housing              | 16. Nozzle Air Pressure Gauge           |
| 8. Fluid Pressure Regulator    | 17. Ejector Plates                      |
| 9. Piston Air Supply Hose      | 18. Air Return Button                   |

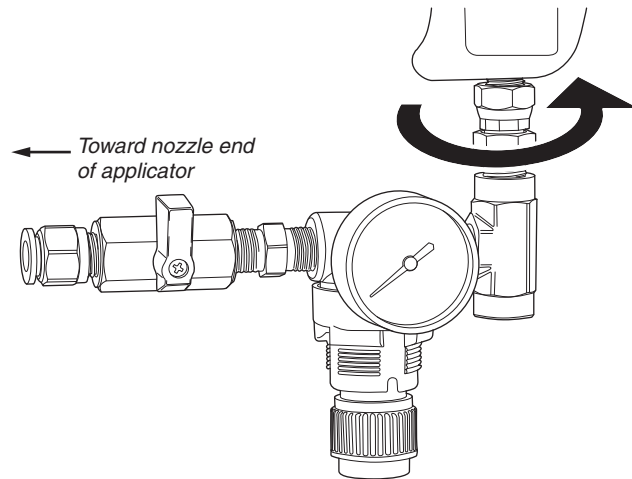
# 3M™ Scotchkote™ Spray System HSS-450 Applicator Set Up

## 1.0 Attach Forward Handle & Regulator

1.1 Attach the forward handle to the front plate by threading it into the hole as shown.



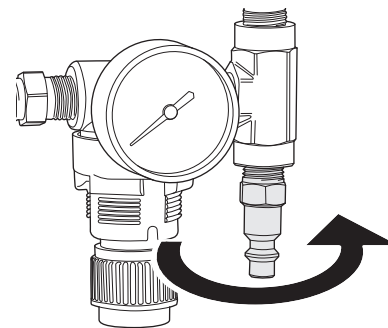
1.2 Thread T-fitting into air inlet on handle of gun. The nozzle air pressure adjustment knob should point towards the ground, and the nozzle air supply hose connection should point toward the nozzle end of the applicator.



1.3 Attach the air supply hose quick-disconnect fitting to the T-fitting.

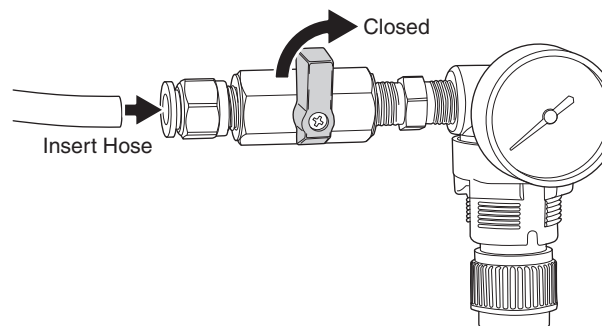
*Note: Confirm the quick-disconnect fitting is the proper size for your air supply hose. Other fittings may be substituted if needed.*

*Note: Wrap the threads on the quick-disconnect fitting with Scotch® Thread Sealant and Lubricant Tape 48 (not included) to prevent leaks and cross-threading.*



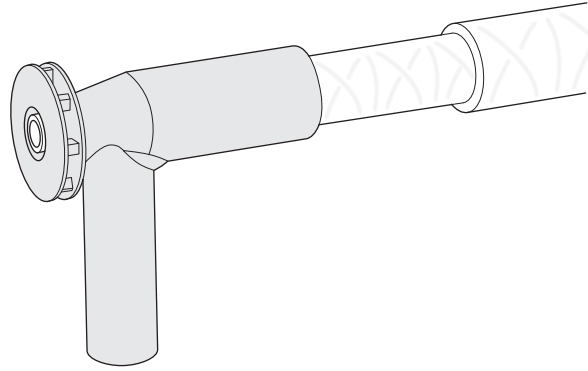
1.4 Push the nozzle air hose firmly onto the connector on the regulator.

1.5 Make sure the ball valve is closed before attaching air supply hose to the unit.

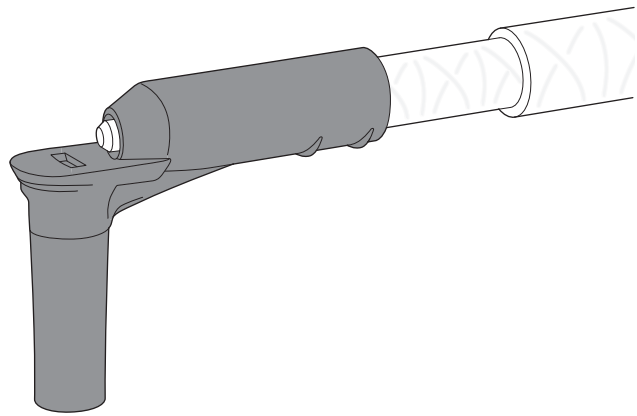


## 2.0 Selecting the Proper Mix Nozzle

3M Corrosion Protection Products offers two different mix nozzles depending on your application. Both nozzles have been selected for use specifically with 3M™ Scotchkote™ Liquid Epoxy Coating 323. The number of mix elements contained in each mix nozzle is unique to Scotchkote 323 and should not be used with any other product.



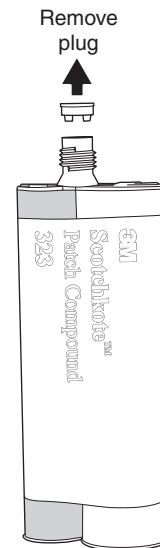
3M™ Scotchkote™ Spray Nozzle Straight Conical Pattern:  
80-6300-0166-9



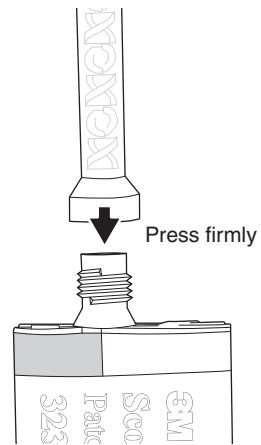
3M™ Scotchkote™ Spray Nozzle 90° Fan Pattern: 80-6300-0165-1

## 3.0 Attach Mix Nozzle to Cartridge

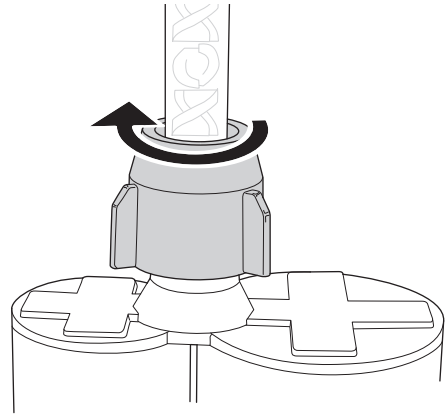
3.1 Stand cartridge assembly with outlet end up. Remove plug.



- 3.2 Place the bell end of the mix nozzle over the cartridge outlet. Press firmly to seat the nozzle.

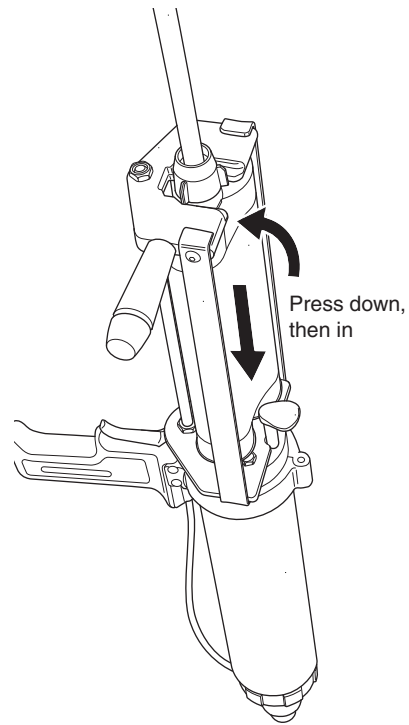


- 3.3 Thread the nut assembly clockwise onto the cartridge outlet and tighten securely.

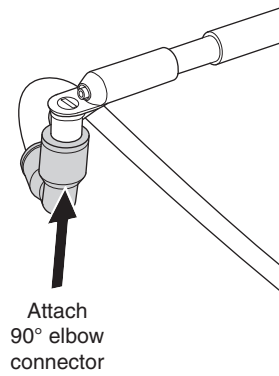


#### 4.0 Install Cartridge In Applicator

- 4.1 Before installing cartridges into gun, hold gun in a vertical position pointing in a safe direction away from yourself and other personnel. This will reduce the chance of material drooling into the mixer bell housing causing premature cure of material in mixer.
- 4.2 Place the large end of the cartridge assembly (piston seal end) over the two ejector plates of the applicator, pushing the cartridge assembly towards the air cylinder, snapping the cartridge into place. Ensure that the cartridge assembly is properly seated in cradle of gun and ejector plates and rod assembly are properly aligned in applicator.



- 4.3 Attach elbow connector on nozzle air hose firmly onto the nozzle inlet.



### 5.0 Using the 3M™ Scotchkote™ Spray System HSS-450 Applicator

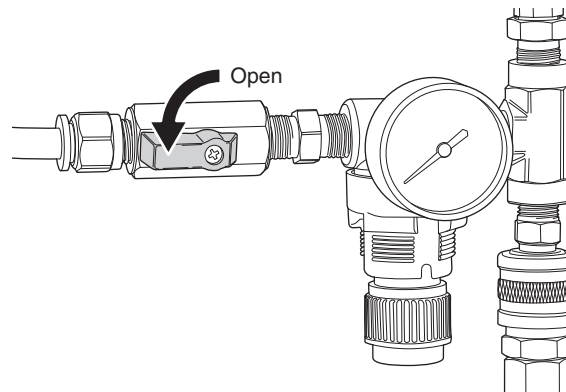
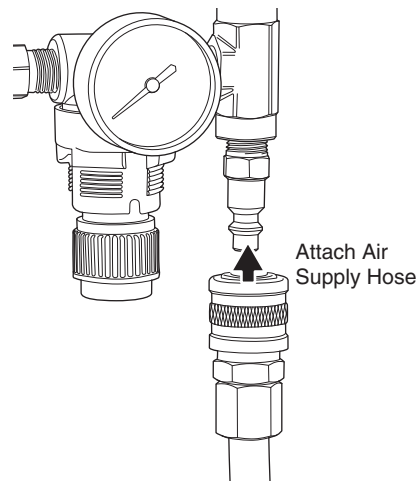
- 5.1 Point applicator upward and attach air supply hose to the regulator. The air supply pressure should be 90–110 psi (6.2–7.6 bar).
- 5.2 Purge cartridge and nozzle by first pointing the nozzle up and pulling the trigger just long enough to fill the mix nozzle with material; release the trigger before actually dispensing material from the nozzle.

Second, point the nozzle into a waste receptacle and dispense approximately a one-half nozzle-length of potentially unmixed material.

**Note:** Do not open the ball valve until after the cartridge and nozzle have been purged.

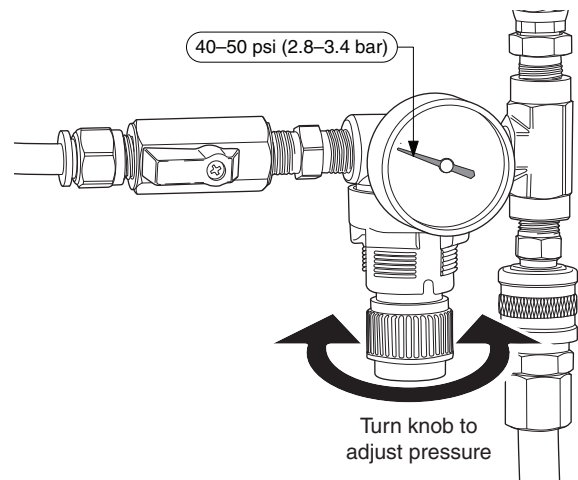
**Note:** Refer to Section 13 of the 3M™ Scotchkote™ Liquid Epoxy Coating 323 Parts A and B MSDSs and applicable regulations or authorities for waste disposal.

- 5.3 Point the nozzle in a safe direction and open the ball valve to start the air flow to the nozzle.

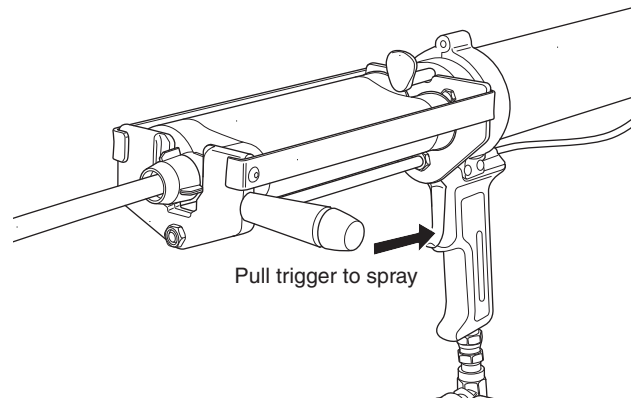




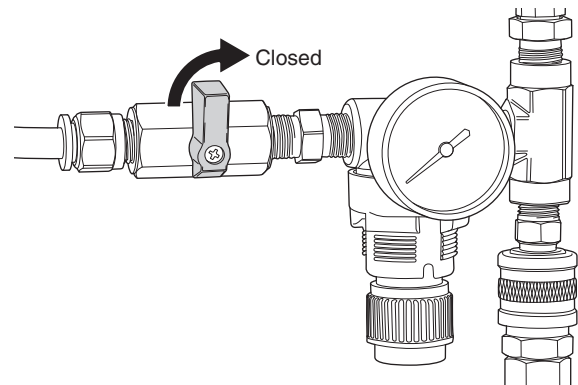
5.4 Turn regulator knob to adjust air pressure to 40–50 psi (2.8–3.4 bar).



5.5 Pull trigger to spray. Release to stop spraying.



5.6 Close the ball valve to stop the air flow to the nozzle.

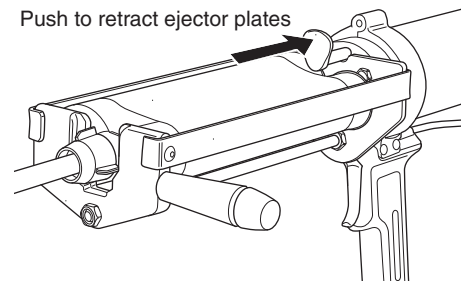
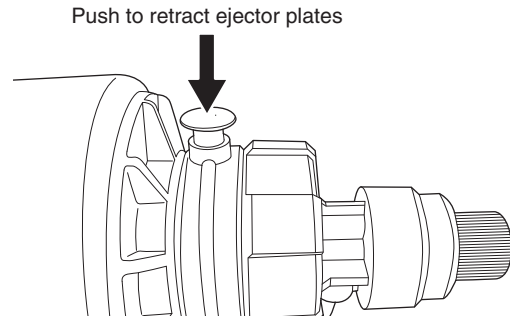


## 6.0 Remove Cartridge From Applicator

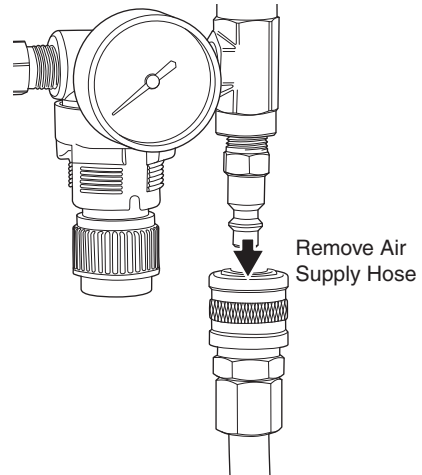
6.1 While pressing the air return button, pull the trigger to retract the ejector plates from the cartridge.

OR,

Push the return pusher toward the air cylinder to retract the ejector plates from the cartridge.

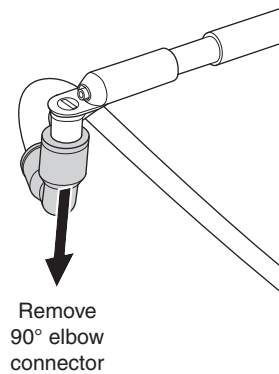


6.2 Remove the air supply hose from the regulator.

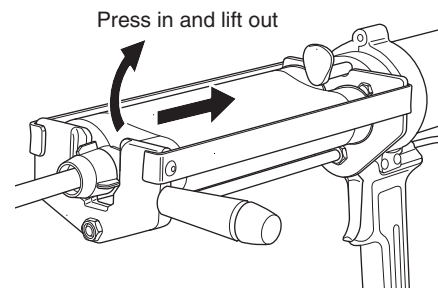


6.3 Remove the elbow connector on nozzle air hose from the nozzle inlet.

**Note: Do not discard the 90° elbow connector. It is not necessary to remove the connector from the nozzle air hose.**

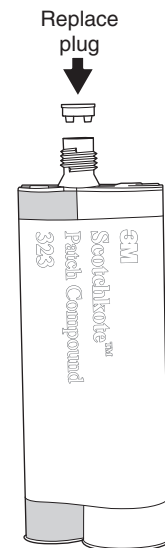


6.4 While holding back the return pusher, push the cartridge assembly towards the air cylinder and lift out of the applicator cradle.



6.5 Partially-used cartridges may be reused by removing and discarding the nozzle and resealing the cartridge with the original plug. Be sure to re-align the plug according to the A and B compounds.

**Note:** Refer to Section 13 of the 3M™ Scotchkote™ Liquid Epoxy Coating 323 Parts A and B MSDSs and applicable regulations or authorities for waste disposal.



## 7.0 Cleaning

Wipe off excess coating material with a clean rag and a small amount of solvent, avoiding getting solvent on regulator and piston housing.

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